

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021441**Date Inspected:** 28-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. Qui Wen**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – NWIT Document No: 008418

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Bike Path. The weld designations reviewed are as follows:

1. DP3175-001-244, 245, 246, 247, 248
2. DP3176-001-042, 040, 038, 036, 034, 118
3. DP3176-001-120, 124, 126, 122, 208, 206, 204

Bay 14

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) repair welding of weld joint SEG3020BB-055 located on Bottom Plate to Vertical Shear Plate of OBG Segment 14W. ZPMC Welder is identified as 067942. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G-(2F)-FCM-Repair, which is used as per Critical Welding Repair (CWR) B-CWR2-2752.

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Flux Core Arc Welding (FCAW) welding of weld joint SEG3020N-175, 177, 171 and 173 located on Edge plate stiffener of OBG Segment 14W. ZPMC Welder is identified as 201215. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2132-ESAB.

FCAW welding of weld joint SEG3020U-564 located on anchor plate to bottom plate of OBG Segment 14W. ZPMC Welder is identified as 066239. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

FCAW welding of weld joint SEG3013C-133 located on Deck Panel Diaphragm to Floor Beam Flange at panel point 120 of OBG Segment 13AW. ZPMC Welder is identified as 203871. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

FCAW welding of weld joint SEG3013E-226 located on Deck Panel Diaphragm to Floor Beam Flange at panel point 119 of OBG Segment 13AW. ZPMC Welder is identified as 203871. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

SMAW welding of weld joint SEG3015G-001 located on Deck Panel Diaphragm to Deck Panel Diaphragm at panel point 123.5 of OBG Segment 13CW. ZPMC Welder is identified as 066443. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2213-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3015N-007 located on Longitudinal Diaphragm Stiffener at panel point 123 of OBG Segment 13CW. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2112-FCM-1.

SMAW welding of weld joint SEG3014C-129 and 130 located on Side Plate I-Ribs to Floor Beam at panel point 122 of OBG Segment 13BW. ZPMC Welder is identified as 037996. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2213-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3014E-146, 147 and 148 located on Side Plate I-Ribs to Floor Beam at panel point 121.5 of OBG Segment 13BW. ZPMC Welder is identified as 037996. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2213-Tc-U4b-FCM-1.

Flux Core Arc Welding (FCAW) welding of weld joint DP3174-001-281 and 380 located on Deck Panel Diaphragm U-Ribs of OBG Segment 14W. ZPMC Welder is identified as 204730. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2132-ESAB.

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SMAW repair welding of weld joint DP3174-001-018 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 066398. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G-(2F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20313.

SMAW repair welding of weld joint DP3173-001-003 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 066459. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G-(2F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20289.

This QA inspector observed ZPMC personnel performed Ultrasonic Testing on Side Plate I-stiffeners to Floor Beam 'T' joint weld at panel point 128.3 of OBG Segment 14W. See the attached pictures.

SMAW repair welding of weld joint DP3172-001-021 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 067520. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G-(2F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20313.

SMAW repair welding of weld joint DP3172-001-018 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 066155. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G-(2F)-FCM-Repair, which is used as per Critical Welding Repair Report (CWR) B-CWR-2830.

SMAW repair welding of weld joint DP3174-001-017 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 067588. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G-(2F)-FCM-Repair, which is used as per Critical Welding Repair Report (CWR) B-CWR-2820.

Bay 19

This QA Inspector observed the following work in progress:

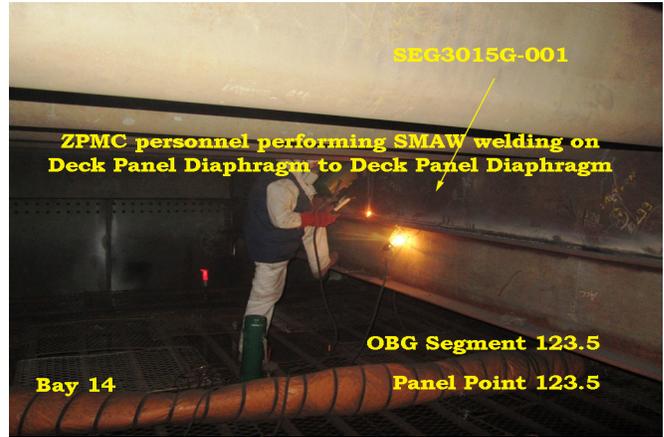
Flux Core Arc Welding (FCAW) welding of weld joint BK004A2-013-019 on Anchor plate to Bottom Cover Plate of OBG Bike Path BK004A-014. ZPMC Welder is identified as 050082. ZPMC Quality Control (QC) is identified as Mr. Guo Xing Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2112-Plug.

ZPMC personnel performing heat straightening on bottom cover plate of OBG bike path member identified as BK004A-014-014~021. Distortion appeared to be caused by mishandling of the welding/material. ZPMC Quality Control (QC) inspector identified as Mr. Xu Tao was present to monitor the heat straightening process. The heat straightening appeared to comply with HSR1 (B) number 9501.

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Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By: Kumar,Vibin

Quality Assurance Inspector

Reviewed By: Patel,Hiranch

QA Reviewer
